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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/828,315	04/21/2004	Rui-Chi Shen	SHEN3034/EM	4220

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EXAMINER

MULLER, BRYAN R

ART UNIT	PAPER NUMBER
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3723

DATE MAILED: 02/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/828,315

Applicant(s)

SHEN, RUI-CHI

Examiner

Bryan R. Muller

Art Unit

3723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 November 2005.
2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,7,8 and 13-28 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 1,2,7,8 and 13-17 is/are allowed.
6) ☒ Claim(s) 18-28 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 21 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al (2005/0145075 A1) in view of Hsien (6,845,691).

3. In reference to claim 18, Lee discloses a ratchet wrench, comprising a handle (12), a drive head (20) mounted on an end of the handle and having a first end formed with a receiving hole (16), a mediate portion formed with a receiving recess (18) communicating with the receiving hole, and a second end formed with a receiving chamber (24) communicating with the receiving recess, a ratchet wheel (36) mounted in the receiving hole of the drive head, a pawl member (52) pivotally mounted in the receiving recess of the drive head and engaged with the ratchet wheel, a control knob (62) rotatably mounted in the receiving chamber of the drive head and having an inside formed with a passage(s) (170, 168) radially extended through the control knob, a positioning plate (184) mounted in the passage of the control knob and having a first end rested on the pawl member to push the pawl member to press the ratchet wheel and an urging spring (186) mounted on a second end of the positioning plate and urged between the positioning plate and the drive head. The positioning plate is bent such that the ends (186) of the plate act as the spring member. Lee, however, fails to

disclose that the ratchet wheel is substantially T-shaped socket. Hsien discloses a ratchet tool that has a T-shaped ratchet wheel wherein the top portion (25) is knurled in order for the user to rotate the ratchet with their fingers (fig. 16) in situations where the fastener is loose, wherein rotating by fingers will be faster than using the handle.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the ratchet wheel of Lee with an upper knurled surface, thus making it T-shaped, to allow the user to quickly rotate the ratchet with their fingers, as taught by Hsien.

4. In reference to claim 19, Lee further discloses that the ratchet wheel has a bottom formed with an annular groove (46) for fixing a C-shaped snap ring (48) which is rested on a bottom of the drive head to secure the ratchet wheel on the drive head.

5. In reference to claim 20, Lee further discloses that the pawl member has a side formed with an annular positioning edge (56), and the positioning plate is rested on the positioning edge of the pawl member.

6. In reference to claim 21, Lee further discloses that the passage of the control knob is aligned with the positioning edge of the pawl member.

7. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al (2005/0145075 A1) in view of Hsien (6,845,691) as applied to claim 18 and further in view of Lack (4,561,329).

8. The obvious combination of Lee and Hsien discloses the wrench as disclosed supra, but fails to disclose that the control knob has a periphery formed with an annular

snap groove, and the ratchet wrench further comprises a limit spring mounted on the snap groove of the control knob to rotate with the control knob. Lack discloses a ratchet wrench having a control knob (25) and discloses that the control knob has an annular snap groove (28) for receiving a limit spring (snap ring, 29) to maintain the position of the control knob within the receiving chamber. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the control knob of Lee with a snap groove for receiving a limit spring to maintain the position of the control knob within the receiving chamber, as taught by Lack, and it is further obvious that the limit spring will rotate with the control knob because the limit spring is attached to the control knob.

9. Claims 23 and 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al (2005/0145075 A1) in view of Hsien (6,845,691) as applied to claim 18 and further in view of Lack (4,561,329).

10. In reference to claim 23, Lee discloses the ratchet wrench, as disclosed supra, and it is made obvious by Lack, also discussed supra to provide the control knob of Lee with a snap groove for receiving a limit spring to maintain the position of the control knob within the receiving chamber.

11. In reference to claim 25, Lee further discloses that the pawl member has a side formed with an annular positioning edge (56), and the positioning plate is rested on the positioning edge of the pawl member.

12. In reference to claim 26, Lee further discloses that the passage of the control knob is aligned with the positioning edge of the pawl member.

13. In reference to claim 27, Lee further discloses that the control knob has a first end formed with a drive handle (64) protruding outward from the drive head and a second end with an enlarged resting plate (not numbered) and it would have been further obvious to provide the snap groove adjacent to the resting plate, because the snap groove in the Lack reference is located on the control knob at the opposite end from the drive handle portion, in order to maintain the position of the control knob in the receiving chamber when the wrench is fully assembled. It is obvious that the snap groove would have to be provided adjacent to the resting plate or adjacent to the drive handle to prevent the snap ring from interfering with the positioning plate and pawl member and it further would be obvious to locate the snap groove adjacent to the resting plate, as discussed supra.

14. In reference to claim 28, it would further be obvious that the snap ring would rest on the resting plate of the control knob because the snap groove would be located adjacent to the resting plate.

15. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al (2005/0145075 A1) in view of Lack (4,561,329) as applied to claim 23 and further in view of Hsien (6,845,691).

16. The obvious combination of Lee and Lack discloses the wrench as disclosed supra, and it further would have been obvious, in view of Hsien, to make the ratchet wheel T-shaped, as discussed supra.

Allowable Subject Matter

17. Claims 1, 3, 7, 8 and 13-17 are allowed.

18. The following is an examiner's statement of reasons for allowance: The art of record (considered as a whole) neither anticipates nor renders obvious a positioning plate that is E-shaped or a positioning plate with a second end that is formed with two slits and a guide shaft located between the two slits, and the urging spring is mounted on the guide shaft in combination with the rest of the claimed limitations set forth in the independent claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

19. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryan R. Muller whose telephone number is (571) 272-4489. The examiner can normally be reached on Monday thru Thursday and second Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph J. Hail III can be reached on (571) 272-4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BRM
1/30/2006

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